

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRIEDRICH SCHAUER and MARTIN CZESCHKA

Appeal 2007-2580
Application 10/290,267
Technology Center 2800

Decided: October 30, 2007

Before ANITA PELLMAN GROSS, JEAN R. HOMERE,
and SCOTT R. BOALICK, *Administrative Patent Judges*.

GROSS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Schauer and Czeschka (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1, 4, 5, and 7, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants' invention relates to a connector for a coaxial cable. See generally Specification, page 1. Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. An arrangement for attaching a plug-in connector to a shielded electric line, said line having a core with at least one insulated conductor, a shield comprising a braid made of metallic wires applied over said core, a sheath made of insulating material enclosing the shield, and a tubular, metallic contact element, against the external surface of which the shield of the line abuts all around and through which the core of the line is guided, the plug-in connector includes a plug side and is positioned in a pot-shaped metallic housing which surrounds the plug-in connector over its entire length and leaves said plug side free, the contact element comprises:

a tube connector projecting through a wall of the housing, said tube connector having an extension at its end lying in the housing which is integral with the tube connector, wherein

said extension protrudes outwards with a perpendicular transition from the tube connector and presses against the wall tightly and solidly within the housing,

the shield is fixed to the tube connector via a crimp sleeve pressed over the tube connector projecting out of the housing, and

the crimp sleeve is in a mounting position so as to abut tightly to the outside of said wall of the housing.

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

| | | |
|----------|---------------|---------------|
| Holliday | US 6,146,197 | Nov. 14, 2000 |
| Schauer | DE 3242073 A1 | May 17, 1984 |

Claims 1, 4, and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Holliday.

Claim 5 stands rejected under 35 U.S.C. § 103 as being unpatentable over Holliday in view of Schauer.

We refer to the Examiner's Answer (mailed April 24, 2006) and to Appellants' Brief (filed September 28, 2004) and Reply Brief (filed June 26, 2006) for the respective arguments.

SUMMARY OF DECISION

As a consequence of our review, we will reverse the anticipation rejection of claims 1, 4, and 7 and also the obviousness rejection of claim 5.

OPINION

Appellants contend (App. Br. 12) that Holliday fails to disclose a shield formed of a braid of metallic wires or a crimp sleeve pressed over the tube connector. Appellants conclude, therefore, that Holliday fails to anticipate claims 1, 4, and 7. For claim 5, Appellants (App. Br. 15) contend that Schauer fails to cure the deficiencies of Holliday, but do not argue the combinability of Schauer and Holliday. The Examiner asserts (Ans. 5-6) that Holliday's fabric layer 17 must be a shield of braided metallic wires and that Holliday's outer sleeve 24 satisfies the claimed crimp sleeve. The Examiner (Ans. 5-6) cites Aldissi, US Patent No. 5,180,884, as evidence that Holliday's fabric layer is inherently a braid of metallic wires. The issue, therefore, is whether Holliday's fabric layer is inherently a braid of metallic wires and whether Holliday's outer sleeve 24 is a crimp sleeve pressed over the tube connector.

Holliday does not disclose how fabric layer 17 is made. However, Holliday does disclose (col. 2, ll. 19-21) that cable 14 is a conventional

coaxial cable composed of a conductor 15, an insulating layer 16, and fabric layer 17. Aldissi discloses (col. 1, ll. 55-60) a new type of shielded wire and cable that uses fine mesh yarns or fibers that have been coated with a thin layer of metal. We agree with Appellants (Reply Br. 4-5) that the disclosure of Aldissi does not show that Holliday's fabric layer is inherently a metallic braid. However, as indicated *supra*, Holliday discloses a coaxial cable, which is defined (Denis Howe, *The Free On-line Dictionary of Computing*, © 1992-2007, <http://dictionary.reference.com/browse/coaxial%20cable>) as "[a] kind of cable with a solid central conductor surrounded by insulator, in turn surrounded by a cylindrical shield woven from fine wires." Since Holliday's fabric layer 17 surrounds insulating layer 16, which in turn surrounds conductor 15, fabric layer 17 must be a cylindrical shield woven from fine wires. Accordingly, Holliday inherently discloses a shield of braided metallic wires.

Holliday further shows in Figure 2 that outer sleeve 24 includes an extension that covers outer layer 18, which in turn covers fabric layer 17, and an extension portion of thimble 21 (which the Examiner, at page 4 of the Answer, associates with the claimed tube connector). Holliday discloses (col. 2, ll. 50-59) that the extension of outer sleeve 24, in the invention, is "fitted with a taper jacket **50**," and the taper jacket is pressed downwardly on the extension part to firmly connect the taper jacket and the extension part. With such a connection, engaging teeth in the extension part engage with outer layer 18 of the coaxial cable. Holliday clearly requires a taper jacket to press the various elements together. Nowhere does Holliday teach or even suggest that the extension part is crimped or presses over the tube connector. Therefore, the extension of outer sleeve 24 does not function as a

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crimp sleeve. Since Holliday fails to teach or disclose each and every element of independent claim 1, we cannot sustain the anticipation rejection of claims 1, 4, and 7. In addition, we agree that Schauer does not cure the deficiency of Holliday. Therefore, the combination of Holliday and Schauer fails to render obvious claim 5. Consequently, we cannot sustain the obviousness rejection of claim 5.

ORDER

The decision of the Examiner rejecting claims 1, 4, and 7 under 35 U.S.C. § 102(b) and claim 5 under 35 U.S.C. § 103 is reversed.

REVERSED

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SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

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| Notice of References Cited | Application/Control No. 10/290,267 | Applicant(s)/Patent Under Reexamination | |
| | Examiner Chandrika Prasad | Art Unit 2800 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

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| * | U | Denis Howe, "The Free On-line Dictionary of Computing", 1992-2007, http://dictionary.reference.com/browse/coaxial%20cable |
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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coaxial cable

-noun Electricity.

a cable that consists of an insulated conducting tube through which a central, insulated conductor runs, used for transmitting high-frequency telephone, telegraph, digital, or television signals.

Also called [coax](#).

[Origin: 1935-40]

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n. A cable consisting of a conducting outer metal tube that encloses and is insulated from a central conducting core, used primarily for the transmission of high-frequency signals. Also called *coaxial line*.

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coaxial cable

noun

a transmission line for high-frequency signals

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coaxial cable   (kō-āk'sē-əl) [Pronunciation Key](#)

A cable consisting of an electrically conductive wire surrounded by a layer of insulating material, a layer of shielding material, and an outer layer of insulating material, usually plastic or rubber. The purpose of the shielding layer is to reduce external electrical interference. Coaxial cables are used for transmission of high-frequency audio, video, computer network and other signals.

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coaxial cable *hardware*

A kind of cable with a solid central conductor surrounded by insulator, in turn surrounded by a cylindrical shield woven from fine wires. It is used to carry high frequency signals such as [video](#) or [radio](#). The shield is usually connected to electrical ground to reduce electrical

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